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* * * * *

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUBMISSION OF FORMAL DRAWINGS

Sir:

Enclosed herewith are eleven (11) sheets of formal, inked drawings for the
above-identified application.

Respectfully submitted,

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Fig.1.

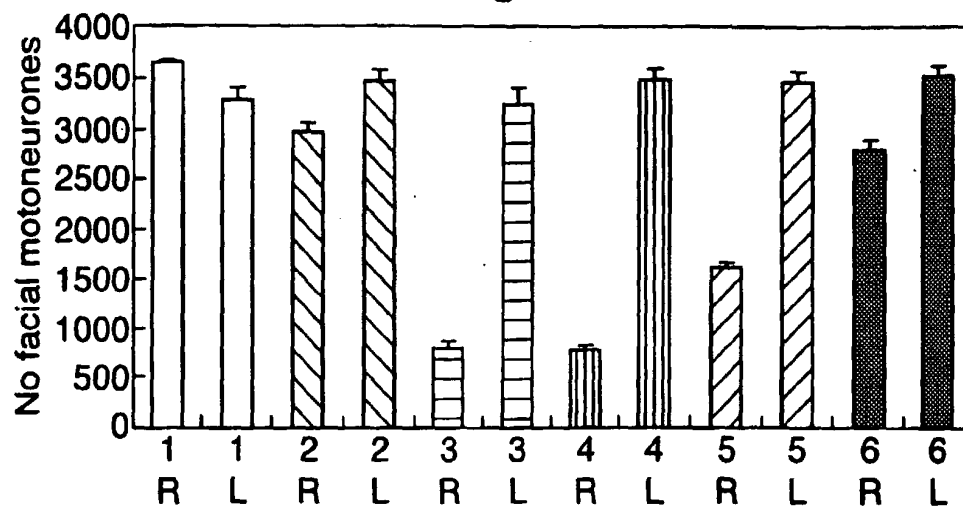


Fig.2a.

Avulsion



Fig.2b.

Avulsion

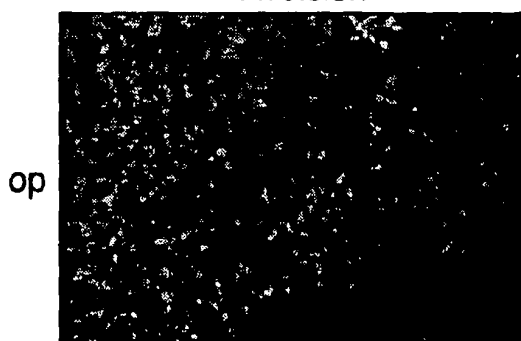


Fig.2c.

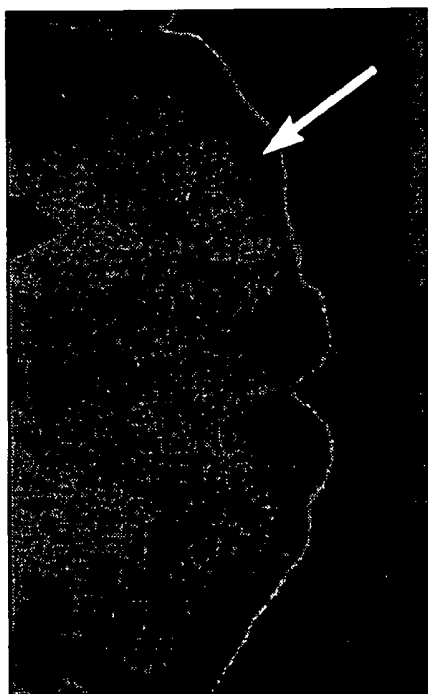
Avulsion



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Fig.3a.

Plasmid



non-op

op

Fig.3b.

Plasmid

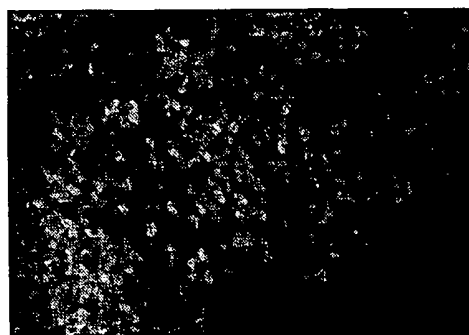
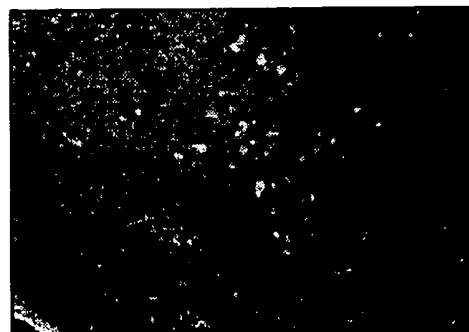


Fig.3c.

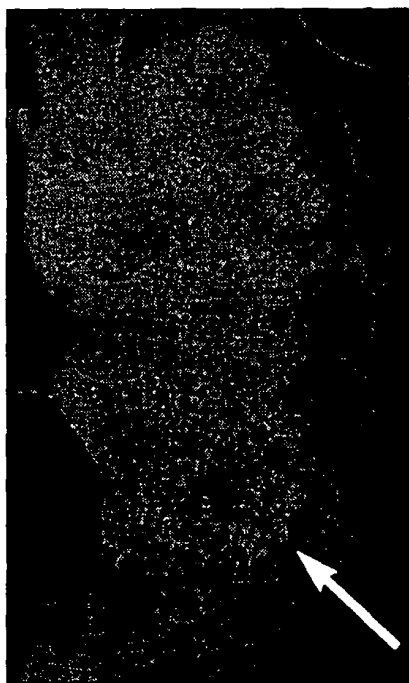
Plasmid



op

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Fig4a.
MGF Plasmid

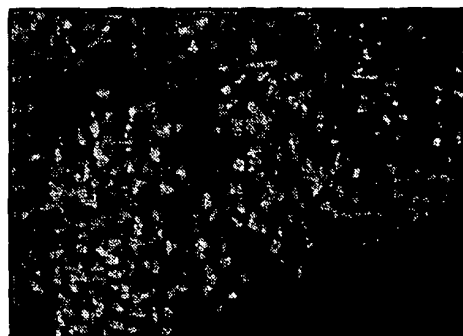


op

non-op

non-op

Fig4b.
MGF Plasmid



op

Fig4c.
MGF Plasmid

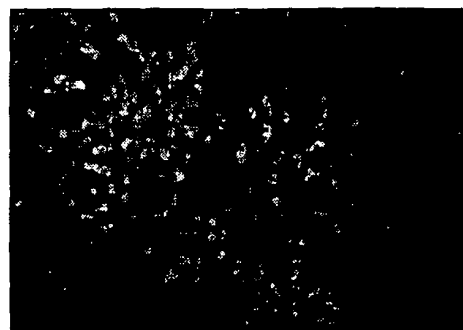


Fig.5.

cdna sequence of Human MGF

Exon 3
 GGACCGGAGACGCTCTGCGGGGCTGAGCTGGTGGATGCTCTTCAGTTCGTGTGGAGACAGGGGCTTTTATTTCACAAGCCACAGGGTATGGCTCCAGCAGTCCG
 Exon 4
 AGGGCGCCTCAGACAGGCATCGTGGATGAGTGTCTCCGGAGCTGTGATCTAAGGAGGCTGGAGATGTATTGGCCACCCCTCAAGCCTGCCAAGTCAGCTCGCTC
 Exon 5
 TGTCCTGCCCCAGCGCCACACCGACATGCCCAAGACCCAGAGTATCAGCCCCCATCTACCAACAAGAACACAGGAGTCTCAGAGAGGAAAGGAAAGTACATTGGAAG
 Exon 6
 .ACACAAGTAGAGGGAGTGCAGGAAACAAGAACTACAGGATGTAGAAGACCCCTTCTGAGGAGTGAAGAAGACAGGCCACCGCAGGACCCCTTTGCTCTGCACAGTTA
 CCTGTAAACATTGGAATACCGGCCCAAAAATAAGTTTGATCACATTTCAAAGATGGCATTTCCTCCCAATGAATAACACAAGTAAACAT

Protein sequence of Human MGF

Exon 3
 GlyProGluThrLeuCysGlyAlaGluLeuValAspAlaLeuGlnPheValCysGlyAspArgGlyPheTyrPheAsnLysProThrGlyTyrGlySerSerSerAr
 Exon 4
 gArgAlaProGlnThrGlyIleValAspGluCysCysPheArgSerCysAspLeuArgArgLeuGluMetTyrCysAlaProLeuLysProAlaLysSerAlaArgS
 Exon 5
 erValArgAlaGlnArgHisThrAspMetProLysThrGlnLysTyrGlnProProSerThrAsnLysAsnThrLysSerGlnArgArgLysGlySerThrPheGlu
 Exon 6
 GluHisLys

Fig.6.

cDNA sequence of Rat MGF

Exon 3
 GGACCAGAGACCCCTTTGCCGGGGCTGAGCTGGTGGACGCTCTTCAGTTCCGTGTGGACCAAGGGGCTTTACTTCAACAAGCCACACAGTCTATGGCTCCAGCATTCG
 Exon 4
 GAGGGCACACAGACGGGCATTGTGGATGAGTGTGCTTCCGGAGCTGTGATCTGAGGAGGCTGGAGATGTACTGTGTCCGCTGCAAGCCTACAAAGTCAGCTCGTT
 Exon 5
 CCATCCGGGCCCCAGCGCCCACTGACATGCCCAAGACTCAGAAGTCCAGCCCTATCGACACACAAGAAAAGGAGCTGCAAAAGGAGAAGGAAAGGAAAGTACACTT
 Exon 6
 GAAGAACAAGTAGAGGAAGTGCAGGAAACAAGACCCTACAGAATGTAGGAGGAGCCCTCCCGAGGAACAGAAAATGCCACGTCACCCGAAGATCCCTTGCTGCTTGA
 GCAACCTGCAAAACATCGGAACACCTGCCAAATATCAATAATGAGTTCAATATCAATTCAGAGATGGGCATTTCCCTCAATGAAATACACAAGTAAACATTTCCCGGA

ATTC

Protein sequence of Rat MGF

Exon 3
 GlyProGluThrLeuCysGlyAlaGluLeuValAspAlaLeuGlnPheValCysGlyProArgGlyPheTyrPheAsnLysProThrValTyrGlySerSerIleAr
 gArgAlaProGlnThrGlyIleValaspGluCysCysPheArgSerCysAspLeuArgArgLeuGluMetTyrCysValArgCysLysProThrLysSerAlaArgS
 erIleArgAlaGlnArgHisThrAspMetProLysThrGlnLysSerGlnProLeuSerThrHisLysLysArgLysLeuGlnArgArgArgLysGlySerThrLeu
 Exon 5
 GluGluHisLys

Fig.7.

cDNA sequence of Rabbit MGF

Exon 3
 GGACCGGAGACGCTCTGCGGTGCTGAGCTGGTGGATGCTCTTCAGTTTCGTGTGTGGAGACAGGGGCTTTTATTTCACAAGCCACAGGATACGGCTCCAGCAGTCGGAGGGCACC
 Exon 4
 TCAGACAGGCATCGTGGATGAGTGTGCTTCCGGAGCTGTGATCTGAGGAGGCTGGAGATGTACTGTGCACCCCTCAAGCCGGCAAGGCAGCCCGCTCCGTCCGTGCCAGCGCC
 Exon 5
 ACACCGACATGCCCCAAGACTCAGAAGTATCAGCCCTCCATCTACCAACAAGAAAATGAAGTCTCAGAGGAGAAGAAAGGAAGTACATTGTGAAGAACACAAAGTAGAGGAGTGCAGG
 Exon 6
 AAACAAGAACTACAGGATGTAGGAAGACCCCTTCTGAGGAGTGAAGAAGGACAGGCCACGGCAGGACCCTTTGCTCTGCACAGTTACCTGTAAACATTGGAAATACCGGCCAAAAAAT
 AAGTTTGATCACATTTCAAAGATGGCATTTCCCCCAATGAAATACACAAGTAAACATTC

Protein sequence of Rabbit MGF

Exon 3
 GlyProGluThrLeuCysGlyAlaGluLeuValAspAlaLeuGlnPheValCysGlyAspArgGlyPheTyrPheAsnLysProThrGlyTyrGlySerSerSerArgArgAlaPr
 Exon 4
 oGlnThrGlyIleValAspGluCysCysPheArgSerCysAspLeuArgArgLeuGluMetTyrCysAlaProLeuLysProAlaLysAlaAlaArgSerValArgAlaGlnArgH
 Exon 5
 isThrAspMetProLysThrGlnLysTyrGlnProProSerThrAsnLysLysMetLysSerGlnArgArgArgLysGlySerThrPheGluGluHisLys
 Exon 6

Fig.8.

CDNA sequence of Human L.IGF-1

Exon 3

GGACCGGAGACGCTCTGCGGGCTGAGCTGGTGGATGCTCTTCAGTTCGTGTGTGGAGACAGGGGCTTTTATTCAACAAGCCACAGGGTATGGCTCCAGCAGTCGGAGGGCGCC

Exon 4

TCAGACAGGCATCGTGGATGAGTGTCTGCTTCCGGAGCTGTGATCTAAGGAGCTGGAGATGTATTGGCGCACCCCTCAAGCCTGCCAAGTCAGCTCGCTCTGTCCGTGCCCCAGCGCC

Exon 6

ACACTGACATGCCCCAAGACCCAGAGGAAGTACATTTGAAGAACGCAAGTAGGGAGTGCAGGAAACAAGAACTACAGGATGTAG

Protein sequence of Human L.IGF-1

Exon 3

GlyProGluThrLeuCysGlyAlaGluLeuValAspAlaLeuGlnPheValCysGlyAspArgGlyPheTyrPheAsnLysProThrGlyTyrGlySerSerSerArgArgAlaPr

Exon 4

oGlnTheGlyIleValAspGluCysCysPheArgSerCysAspLeuArgArgLeuGluMetTyrCysAlaProLeuLysProAlaLysSerAlaArgSerValArgAlaGlnArgH

Exon 6

isThrAspMetProLysThrGlnLysGluValHisLeuLysAsnAlaSerArgGlySerAlaGlyAsnLysAsnTyrArgMet

Fig.9.

cdna sequence of Rat L.IGF-1

Exon 3
GGACCAGAGACCCCTTTGCGGGGCTGAGCTGGTGGACGCTCTTCAGTTCGTGTGTGGACCAAGGGGCTTTTACTTTCAACAAGCCCCACAGTCTATGGCTCCAGCATTCCGAGGGGCACC

Exon 4

ACAGACGGGCATTGTGGATGAGTGTGGCTCCGGAGCTGTGATCTGAGGAGGCTGGAGATGTACTGTGTCCGCTGCAAGCCTACAAAGTCAGCTCGTTCCATCCGGGGCCAGCGCC

Exon 6

ACACTGACATGCCCCAAGACTCAGAAGGAAGTACACTTGAAGAACACAAAGTAGAGGAAGTGCAGGAACAAGACCTACAGAATGTAGGAGGAGCCTCCCGAGGAACACAGAAAATGCCCA

CGTCACCGCAAGATCCTTTGCTGCTTGAGCAACCTGCAAAACATCGGAACACCTGCCAAATATCAATAATGAGTTCAATATCATTTTCAGAGATGGGCATTTCCCTCAATGAAATAC

ACAAGTAAACATTCCCGGAATTC

Protein sequence of Rat L.IGF-1

Exon 3
Glyc...oGluThrLeuCysGlyAlaGluLeuValAspAlaLeuGlnPheValCysGlyProArgGlyPheTyrPheAsnLysProThrValTyrGlySerSerIleArgArgAlaPr

Exon 4

oGlnThrGlyIleValAspGluCysCysPheArgSerCysAspLeuArgArgLeuGluMetTyrCysValArgCysLysProThrLysSerAlaArgSerIleArgAlaGlnArgH

Exon 6

isThrAspMetProLysThrGlnLysGluValHisLeuLysAsnThrSerArgGlySerAlaGlyAsnLysThrTyrArgMet

Fig.10.

CDNA sequence of Rabbit L.IGF-1

Exon 3

GGACCGGAGACCGCTCTGCGGTGCTGAGCTGGTGGATGCTCTTCAGTTCGTGTGGAGACAGGGGCTTTATTTCACAAGCCACAGGATACGGCTCCAGCAGTCGGAGGGCACC

Exon 4

TCAGACAGGCATCGTGGATGAGTGCTGCTCCGGAGCTGTGATCTGAGGAGGCTGGAGATGTACTGTGCACCCCTCAAGCCGGCAAAGGCAGCCCGCTCCGTGCCCCAGCGCC

Exon 6

ACACCGACATGCCCAAGACTCAGAAGGAAGTACATTGAAGAACACCACTAGAGGAGCTGCAGGAAACAAGAACTACAGGATGTAGGAAGACCCCTTCTGAGGAGTGAAGAAGGACA

GGCACCAGGACCCCTTGTCTGTGCACAGTTACCTGTAAACATTGGAAATACCGGCCAAAAATAAGTTTGATCACATTCAAAGATGGCATTTCCCCCAATGAAAATACACAAGTA

AACATTC

Protein sequence of Rabbit L.IGF-1

Exon 3

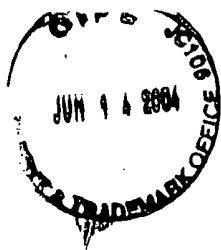
GlyProGluThrLeuCysGlyAlaGlnLeuValAspAlaLeuGlnPheValCysGlyAspArgGlyPheTyrPheAsnLysProThrGlyTyrGlySerSerSerArgArgAlaPr

Exon 4

pGlnThrGlyIleValAspGluCysCysPheArgSerCysAspLeuArgArgLeuGluMetTyrCysAlaProLeuLysProAlaLysAlaAlaArgSerValArgAlaGlnArgH

Exon 6

isThrAspMetProLysThrGlnLysGluValHisLeuLysAsnThrSerArgGlySerAlaGlyAsnLysAsnTyrArgMet



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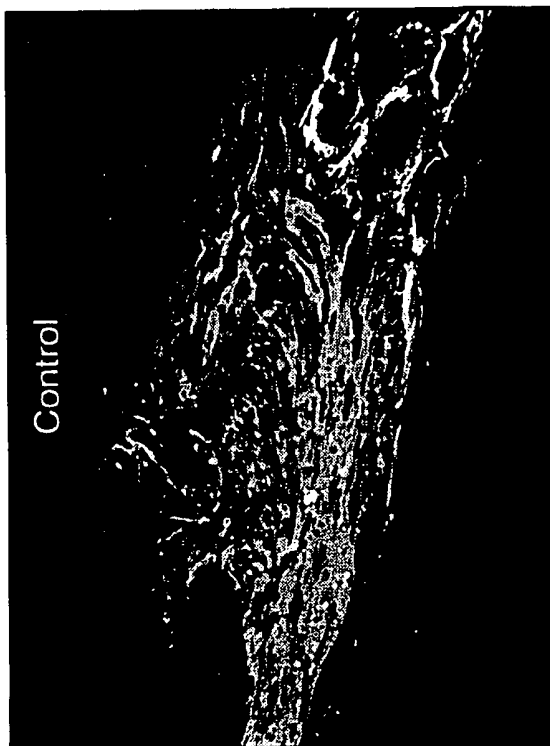
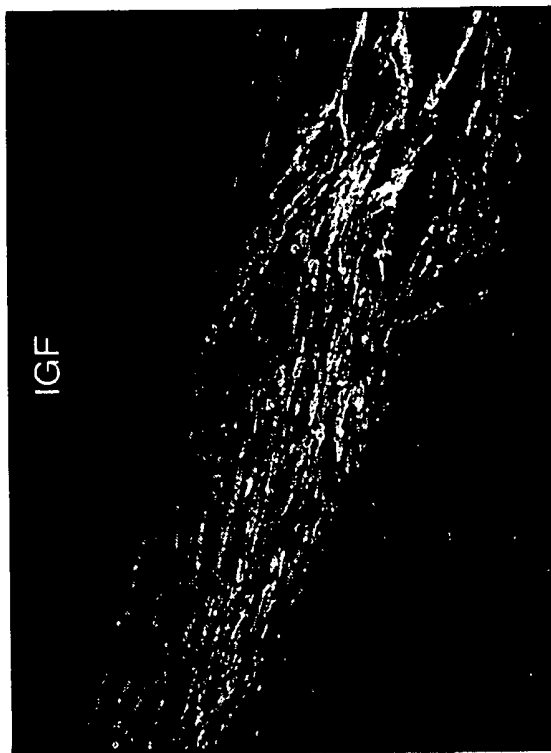
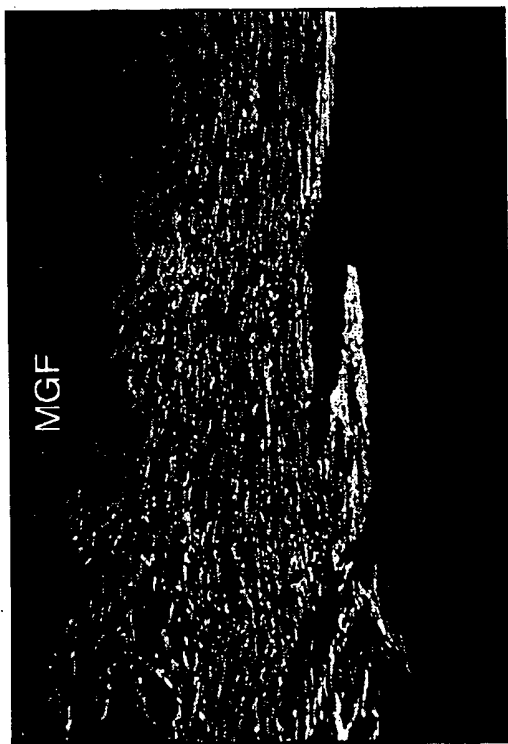


Fig.12.